

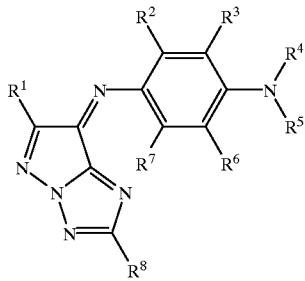
$\text{CONR}^{87}\text{R}^{88}$ ,  $-\text{SO}_2\text{R}^{89}$ ,  $\text{SO}_2\text{NR}^{90}\text{R}^{91}$ ,  $-\text{NR}^{92}\text{CONR}^{93}\text{R}^{94}$ ,  $-\text{NR}^{95}\text{CO}_2\text{R}^{96}$ ,  $-\text{COR}^{97}$ ,  $-\text{NR}^{98}\text{COR}^{99}$ , and  $-\text{NR}^{100}\text{SO}_2\text{R}^{101}$ ; the substituent(s) may further have one or more substituents; the nitrogen-containing heterocycle may be combined with another ring to form a condensed ring; and  $\text{R}^{81}, \text{R}^{82}$ ,  $\text{R}^{83}, \text{R}^{84}$ ,  $\text{R}^{85}, \text{R}^{86}$ ,  $\text{R}^{87}, \text{R}^{88}$ ,  $\text{R}^{89}, \text{R}^{90}$ ,  $\text{R}^{91}, \text{R}^{92}$ ,  $\text{R}^{93}, \text{R}^{94}$ ,  $\text{R}^{95}, \text{R}^{96}$ ,  $\text{R}^{97}$ ,  $\text{R}^{98}$ ,  $\text{R}^{99}$ ,  $\text{R}^{100}$  and  $\text{R}^{101}$  each independently represents a hydrogen atom, an aliphatic group or an aromatic group, and

(b) using the ink for recording in an ink-jet printing device.

**20. An ink-jet printing process comprising:**

(a) preparing an ink an ink jet, containing coloring composition in which coloring particulates contain an oil soluble dye represented by the following formula (III) and an oil soluble polymer, said coloring particulates being dispersed in an aqueous medium,

Formula (III)



wherein  $\text{R}^1$  represents a hydrogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group,  $-\text{OR}^{11}$ ,  $-\text{SR}^{12}$ ,  $-\text{CO}_2\text{R}^{13}$ ,  $-\text{OCOR}^{14}$ ,  $-\text{NR}^{15}\text{R}^{16}$ ,  $-\text{CONR}^{17}\text{R}^{18}$ ,  $-\text{SO}_2\text{R}^{19}$ ,  $-\text{SO}_2\text{NR}^{20}\text{R}^{21}$ ,  $-\text{NR}^{22}\text{CONR}^{23}\text{R}^{24}$ ,  $-\text{NR}^{25}\text{CO}_2\text{R}^{26}$ ,  $-\text{COR}^{27}$ ,  $-\text{NR}^{28}\text{COR}^{29}$ , or  $-\text{NR}^{30}\text{SO}_2\text{R}^{31}$ ; and  $\text{R}^{11}$ ,  $\text{R}^{12}, \text{R}^{13}, \text{R}^{14}, \text{R}^{15}, \text{R}^{16}, \text{R}^{17}, \text{R}^{18}, \text{R}^{19}, \text{R}^{20}, \text{R}^{21}, \text{R}^{22}, \text{R}^{23}, \text{R}^{24}, \text{R}^{25}, \text{R}^{26}, \text{R}^{27}, \text{R}^{28}, \text{R}^{29}, \text{R}^{30}$  and  $\text{R}^{31}$  each independently represents a hydrogen atom, an aliphatic group, or an aromatic group;

$\text{R}^2, \text{R}^3, \text{R}^6$  and  $\text{R}^7$  each independently represents a hydrogen atom, a halogen atom, an aliphatic group, an aromatic group, a heterocyclic group, a cyano group,  $-\text{OR}^{51}$ ,  $-\text{SR}^{52}$ ,  $-\text{CO}_2\text{R}^{53}$ ,  $-\text{OCOR}^{54}$ ,  $-\text{NR}^{55}\text{R}^{56}$ ,  $-\text{CONR}^{57}\text{R}^{58}$ ,  $-\text{SO}_2\text{R}^{59}$ ,  $\text{SO}_2\text{NR}^{60}\text{R}^{61}$ ,  $-\text{NR}^{62}\text{CONR}^{63}\text{R}^{64}$ ,  $-\text{NR}^{65}\text{CO}_2\text{R}^{66}$ ,  $-\text{COR}^{67}$ ,  $-\text{NR}^{68}\text{COR}^{69}$  or  $-\text{NR}^{70}\text{SO}_2\text{R}^{71}, \text{R}^{51}, \text{R}^{52}, \text{R}^{53}, \text{R}^{54}, \text{R}^{55}, \text{R}^{56}, \text{R}^{57}, \text{R}^{58}, \text{R}^{59}, \text{R}^{60}, \text{R}^{61}, \text{R}^{62}, \text{R}^{63}, \text{R}^{64}, \text{R}^{65}, \text{R}^{66}, \text{R}^{67}, \text{R}^{68}, \text{R}^{69}, \text{R}^{70}$  and  $\text{R}^{71}$  each independently represents a hydrogen atom, an aliphatic group or an aromatic group;

$\text{R}^4$  and  $\text{R}^5$  each independently represents a hydrogen atom, an aliphatic group, an aromatic group or a heterocyclic ring; and

$\text{R}^8$  represents a hydrogen atom, an aliphatic group or an aromatic group, and

(b) using the ink for recording in an ink-jet printing device.

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